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Before the Subcommittee on Fisheries and Oceans House Resources Committee U.S. House of Representatives

Hearing on H.R. 1489, the Coastal Ocean Observation System Integration and Implementation Act of 2005

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Introduction

Chairman Gilchrest, Ranking Member Pallone, and Distinguished Members of the Subcommittee, I want to thank you for the opportunity to testify today regarding H.R. 1489, the *Coastal Ocean Observation System Integration and Implementation Act of 2005*. My name is Debra Hernandez and I am here today on behalf of the South Carolina Department of Health and Environmental Control Office of Ocean and Coastal Resource Management. In South Carolina, I serve as the Director of Program and Policy Development, advising state leaders on emerging coastal issues.

I also have the pleasure of working closely with my colleagues from around the nation through the Coastal States Organization (CSO). As you know, CSO represents the interests of the Governors of the thirty-five coastal states and territories on issues related to coastal, Great Lakes, and ocean management. These managers around the country work diligently with dwindling resources and mounting pressures to ensure our coasts remain viable and vibrant components of our nation's ecosystems and economy. As past president of CSO and current Chair of its Science to Management Work Group, I have worked hard to ensure the states are educated about the ocean observation system.

As CSO President, I instigated an initiative we call Science to Management. The purpose of the Science to Management Initiative is to bring together the coastal scientific and management communities to work collaboratively to identify managers' research needs,

share scientific findings, and improve decision-making. The Initiative covers a range of topics, one of which is ocean observations. Through the Initiative, CSO has surveyed 240 coastal managers on their ocean and coastal observing needs and is now hosting a series of focus groups at the regional level. These focus groups are designed to educate coastal managers about the observing system, secure their commitment to participate in the regional association process, and begin to identify the managers' priorities and needs.

Based on these focus groups and other discussions, it is apparent that coastal managers think the coastal ocean observing system holds promise. A well-developed system that serves user needs can provide managers with rapid access to useful environmental data and more timely forecasts of environmental changes and events. In addition, the observing system presents opportunities to enhance ecosystem management by linking offshore data with upland water quality and other watershed information.

In reviewing H.R. 1489, I am glad to report that the states believe H.R. 1489 is an excellent start and are excited that the Committee has chosen observing systems as one of the first coastal issues to address this session.

Today, I will be focusing on five components that are essential to any legislation related to coastal ocean observing. These are (1) the need for monitoring and data in the near-shore areas, (2) the system should to be developed from the bottom-up which means operating at the regional level to ensure the system encompasses the priorities and needs of that region and its constituents, (3) the importance of working with and providing endusers with the tools and expertise necessary to use the observing data, (4) the need for a research and development plan to serve as a road map for the system, and lastly, (5) adequate funding for the system.

The Importance of Near-Shore Observing

To implement an observing system that is applicable to coastal managers, the states resoundingly agree that the system *must* consist of data collection and products for the near-shore and estuarine areas. Coastal management at the state and local level occurs with miles and even feet of the shoreline, not in the blue open water. The states need assurance that funding and resources dedicated to an observation system will provide the data and resources necessary to understand near-shore processes.

As an example of the importance of near-shore processes, I refer to a recent event in South Carolina waters that has made me much more appreciative of the potential to utilize observing system data to address coastal management problems. Last summer dissolved oxygen in the waters approximately 1000 feet off our northern coast went to nearly zero, forcing the traditionally bottom-dwelling flounder to rise to the surface of the water to gulp for air, where incidentally they were caught with cast nets by some very happy pier fishermen. This event shocked and surprised both the scientific and management community, and I believe we will only be able to understand its causes through utilization of observing system data.

The states ask the Committee to add language to H.R. 1489 that explicitly recognizes the importance of near-shore processes and requires NOAA to treat those areas as an integral component of the coastal ocean observing system.

Working at the Regional Level

Regarding the scale of the observing system, the states generally support regional approaches and believe that the observing system will be most effective if priorities are set and the system is implemented as close as possible to the resources and those who manage them. These themes are echoed in the report of the U.S. Commission on Ocean Policy and the President's response to the Report, both of which support regional approaches to ecosystem management.

Through CSO's Science to Management Initiative and regional focus groups, the states are developing detailed lists of the information and data they desire from the observing system. Last November, for example, the Southeast managers met to discuss water quality and coastal hazards measures that if provided could help states better manage coastal resources. Priorities that emerged included ambient water quality, data and circulation patterns in near-shore waters, biological monitoring, and sediment loading. By working closely with the Southeast regional association and other partners, these important measures can be incorporated into the system and result in applied, on-the-ground management. The summary report for the Southeast Focus Group is attached to this testimony and may also be found on the CSO website at http://www.coastalstates.org.

The states would like to work with the Subcommittee to add a regional focus to H.R. 1489. The absence of regional associations in H.R. 1489 leaves the perception that the process is centralized within NOAA. We need to ensure the system is developed by enhancing existing regional efforts and bringing more constituents and users into the process, not concentrating it in Washington DC.

Lastly, it is unclear what accountability, beyond consultation, NOAA will have to the National Ocean Research Leadership Council and the Ocean and Research Advisory Panel. The states would appreciate clarification on these oversight and accountability roles.

Partnering with End-Users to Develop and Utilize the System

CSO appreciates that H.R. 1489 recognizes the importance of state and constituent input in developing the system. Reaching out to the state resource management community in a meaningful way is essential to the system's success. CSO has and continues to urge NOAA and the regional associations to seek out state coastal manager input and likewise has encouraged the state coastal managers to make their voices heard through participation at the regional level.

The states also support the requirement in H.R. 1489 that mandates NOAA work with user groups to develop end-use products. Recognizing the importance of users and end-use products highlights that the bill's sponsor understands the importance of getting the observing data into the hands of decision-makers and in a form they can use. The observing system should be defined as including not just the buoys and data management components, but also the capability of the user to integrate and utilize the information that is produced.

The states would like to see this support for end-users expanded to the pilot projects proposed in the bill. Targeted end-use products are needed to help demonstrate the utility of observing data to coastal managers. Long-term sustainability of the observing system depends on successfully engaging users in supporting both development and maintenance of the system. To date, observing system efforts have focused on inventorying buoys and other assets, identifying available data sets, and setting standards for data integration. While these are important activities for developing the system, coastal managers have too few examples of the tools and information that can result from observing system data. Amending H.R. 1489 to authorize and provide resources for end-use products would be a valuable step towards building a constituency among data users and decision-makers for the observing system.

Another concern in H.R. 1489 is the lack of outreach and education components as well as opportunities to partner with states. To utilize observing system products for taking on-the-ground action, states must have the necessary technical expertise. Such expertise is gained through targeted outreach, education, and training. We would respectfully suggest that this training be delivered by augmenting existing programs such as NOAA Sea Grant, National Estuarine Research Reserves, the Coastal Services Center, and the Centers for Ocean Sciences Education Excellence.

Regarding partnerships, the funding mechanisms prescribed in H.R. 1489 seems to preclude opportunities for state-federal partnerships by providing funds only to federal agencies and "units" that operate marine sensors and other devices that collect remotely sensed and in situ data. This requirement limits states, who may desire to integrate state data sets, such as upland water quality data, from participating in the observing system. Integrating state data is an important step towards managing on the ecosystem level; however, integrating data sets may require personnel or new equipment to comply with data standards.

H.R. 1489 should be amended to allow funding for partnerships with states as well as training and education. Unless some of the funding Congress is making available for the new system is provided directly to states for training, personnel, and tools to use and integrate the information generated by the system, the observation system's utility will remain largely unrealized.

Research and Development Plan

H.R. 1489 does not require a research and development plan to address gaps between current knowledge and assets and what is needed. The states would appreciate such a plan. The research and development plan is essential for states to understand where the observing system is headed, the overall cost of the system and its future priorities, and to ensure that the observing needs identified by states will be adequately addressed. CSO requests that a research and development plan requirement be added to H.R. 1489.

Funding for the System

Lastly, CSO supports the purposes outlined in the bill, but is concerned that the authorization levels suggested in H.R. 1489 will not be adequate to achieve the scope of those purposes. Mitigating and predicting natural hazards and understanding the marine processes via an observation system is a goal that is certain to provide economic and environmental benefits to society; however, building such a comprehensive system that includes coordination of data providers and partnerships, training, and resources for end users will require a substantial investment. In light of current budget cuts at both the federal and state levels, it is particularly important that this new investment does not come at the expense of existing core coastal management programs.

Conclusion

Mr. Chairman, thank you again for this opportunity to testify on a topic of great importance to the coastal management community. I would be pleased to answer any questions you or others on the Subcommittee may have.